

3. TOBACCO USE

Number	Objective
1	Adult tobacco use
2	Cigarette smoking during pregnancy
3	Adolescent tobacco use
4	Age at first use of tobacco
5	Adolescent never smokers
6	Smoking cessation
7	Smoking cessation during pregnancy
8	Smoking cessation by new mothers
9	Smoking cessation attempts among adolescents
10	Advice to quit smoking
11	Treatment of nicotine addiction
12	Providers advising smoking cessation
13	Physician inquiries about secondhand smoke
14	Tobacco-free schools
15	Worksite smoking policies
16	Smoke-free air laws
17	Enforcement of minors' access laws
18	Retail license suspension for sales to minors
19	Adolescent disapproval of smoking
20	Adolescent perception of harm of tobacco use
21	Tobacco use prevention education
22	Cigarette price increase
23	Tobacco product price increase
24	State tobacco control programs
25	Preemptive tobacco control laws

Tobacco Use

Goal

Reduce disease, disability, and death related to tobacco use and exposure secondhand smoke by (1) preventing initiation of tobacco use, (2) promoting cessation of tobacco use, (3) reducing exposure to secondhand smoke, and (4) changing social norms and environments that support tobacco use.

Terminology

(A listing of all acronyms used in this publication appears on page 28 of the Introduction.)

Overview

Nature of the Problem

Scientific knowledge about the health consequences of tobacco use has increased greatly since the release of the first Surgeon General's Report on tobacco in 1964.^{1,2} It is now well documented that smoking cigarettes causes heart disease; cancers of the lung, larynx, esophagus, pharynx, mouth, and bladder; and chronic lung disease. Cigarette smoking also contributes to cancer of the pancreas, kidney, and cervix. Consequences of smoking during pregnancy include spontaneous abortions, low birthweight, and sudden infant death syndrome.³ Use of smokeless tobacco causes a number of serious oral health problems, including cancer of the mouth, gum periodontitis, and tooth loss.^{4,5} Cigar use causes cancer of the larynx, mouth, esophagus, and lung.⁶

Such tobacco-related diseases result in over 400,000 deaths among adults in the United States per year, which represent over 5,000,000 years of potential life lost.⁷ If current tobacco use patterns in this Nation persist, an estimated 5 million persons who were aged 0 to 17 in 1995 will die prematurely from a smoking-related disease.⁸ Direct medical costs attributable to smoking total about \$50 billion per year⁹; direct medical costs attributable to smoking during pregnancy are approximately \$1.4 billion per year.¹⁰

Exposure to secondhand smoke has serious health consequences.^{11,12} Researchers have identified more than 4,000 chemical compounds in tobacco smoke; of these, at least 43 cause cancer in humans and animals.¹³ Each year, because of exposure to secondhand smoke, an estimated 3,000 nonsmoking Americans die of lung cancer, and 150,000 to 300,000 children suffer from lower respiratory tract infections.¹⁴ Studies also have found that secondhand smoke exposure causes heart disease among adults.^{15,16} Data reported from a nationally representative sample of the U.S. population aged 4 and older (the Third National Health and Nutrition Examination Survey) indicated that among non-tobacco users, 87.9 percent had detectable levels of serum cotinine, a biological marker for exposure to secondhand smoke.¹⁷ Both home and workplace environments were found to significantly contribute to the widespread exposure to secondhand smoke. Data from a 1996 study indicate that 21.9 percent of U.S. children and adolescents under age 18 (approximately 15 million children and adolescents) were exposed to secondhand smoke in their homes.¹⁸

The prevalence of smoking among adults declined steadily from the mid 1960s through the 1980s. This decline appears to have been based on widespread educational and public health efforts beginning with the

publication of the 1964 *Surgeon General's Report*. However, smoking among adults appears to have leveled off in the 1990s. The prevalence of smoking among adults in 1995 was 24.7 percent.¹⁹

A solid body of scientific evidence indicates that tobacco use and addiction usually take root in adolescence and that tobacco use may increase the probability that an adolescent will use other drugs (see Substance Abuse chapter). Among adults in the United States who have ever smoked daily, 82 percent tried their first cigarette before age 18, and 53 percent became daily smokers before age 18.²⁰ Preventing tobacco use among youth has therefore emerged as a major focus of tobacco control efforts.

Development of effective prevention strategies among youth has become even more critical due to recent increases in tobacco use among adolescents. Tobacco use among adolescents has increased in the 1990s after experiencing decreases in the 1970s and 1980s. Data from the 1997 Monitoring the Future study indicate that past-month smoking among 8th, 10th, and 12th graders was 19.4, 29.8, and 36.5 percent, respectively; these rates represent increases of 20 to 40 percent since 1991.²¹ Data from the Centers for Disease Control and Prevention's (CDC's) Youth Risk Behavior Survey (YRBS) reveal that past-month smoking among 9th to 12th graders rose from 27.5 percent in 1991 to 36.4 percent in 1997.²² Past-month smokeless tobacco use among 9th to 12th graders was 9.3 percent in 1997 (15.8 percent among males and 1.5 percent among females).²³ In 1997, past-month cigar use among 9th to 12th graders was 22.0 percent (31.2 percent of males and 10.8 percent of females).²⁴

Determinants of Initiation of Tobacco Use Among Youth

The five key stages of initiation and establishment of tobacco use among young people are: (1) forming attitudes and beliefs about tobacco; (2) first trying tobacco; (3) continuing experimentation with tobacco; (4) regularly using tobacco; and (5) becoming addicted to tobacco.²⁵

Youth are put at increased risk of initiating tobacco use by sociodemographic, environmental, and personal factors. Sociodemographic risk factors include coming from a family with low socioeconomic status. Environmental risk factors include accessibility and availability of tobacco products, cigarette advertising and promotion, price of tobacco products, perceptions that tobacco use is normal, peers' and siblings' use and approval of tobacco use, and lack of parental involvement. Personal risk factors include a lower self-image and lower self-esteem than peers, the belief that tobacco use is functional (that it is useful or provides a benefit), and lack of self-efficacy in the ability to refuse offers to use tobacco.²⁶

Cigarette advertising plays an important role by affecting young people's perceptions of the pervasiveness, image, and function of smoking.²⁷ The Food and Drug Administration's (FDA's) 1996 tobacco regulation concluded that although advertising may not be the most important factor in a child's decision to smoke, it is a substantial contributing factor.²⁸ Brand preference data indicate that teens are nearly three times more likely than adults to smoke the most heavily advertised brands of cigarettes.²⁹ In addition to advertising, the extensive glamorization of tobacco use by the entertainment media also appears to influence teen attitudes about tobacco use.

The price of tobacco products has a large impact on youth smoking. Multiple studies clearly demonstrate that increases in the price of tobacco products reduce the use of both cigarettes and smokeless tobacco among adults and youth.³⁰⁻³⁴ Economic studies show that a 10 percent increase in the price of cigarettes will reduce overall smoking among adults by about 4 percent^{35,36} and that a 10 percent increase in cigarette prices leads to a 7 percent reduction in teen smoking.³⁷

Qualitative research among young people provides additional insight into why youth smoke. Young people reported the following reasons for smoking: to improve their image, specifically to impress peers and achieve a sense of identity; to help cope with stress and manage mood; and to achieve a sense of belonging.³⁸ These themes are reinforced by the images of tobacco advertising that portray smoking as a popular part of a positive, active, and fun lifestyle. Addiction and the physiological/drug effects of nicotine also were cited by young people as reasons to continue to smoke. In addition, young people report that parents and family have an enormous impact on youth smoking, due both to modeling from smokers in the family and to stress related to the family.³⁹

Determinants of Maintenance of Tobacco Use

The principal determinant for maintenance of tobacco use is the addictive nature of tobacco. There is overwhelming evidence that nicotine found in tobacco is addictive and that addiction occurs in most smokers during adolescence.^{40,41} Among students who were high school seniors during 1976 to 1986, a total of 44 percent of daily smokers believed that in 5 years they would not be smoking; however, followup studies have indicated that 5 to 6 years later, 73 percent of these persons remained daily smokers.⁴² In 1995, 68.2 percent of current smokers wanted to quit smoking completely, and 45.8 percent of the current everyday smokers had stopped smoking for at least 1 day during the preceding 12 months.⁴³ However, current estimates indicate that only 2.5 percent of current smokers stop smoking permanently each year.⁴⁴

Tobacco Control Interventions

Efforts to reduce tobacco use in the United States have shifted from focusing primarily on smoking cessation for individuals to focusing more on population-based interventions that emphasize prevention of initiation and reduction of exposure to environmental tobacco smoke.⁴⁵⁻⁵² Federal, State, and local government agencies and numerous health organizations have joined together to develop and implement prevention activities based on this approach. This change from emphasis on individual behavior to emphasis on population-based strategies has come about because tobacco use appears to be susceptible to changes in the social environment.

Controlled-design community research studies and evidence from California and Massachusetts have shown that comprehensive programs can be effective in reducing per capita tobacco consumption. Both California and Massachusetts increased their cigarette excise taxes and designated a portion of the revenues for comprehensive tobacco control programs. Data from these States indicate that (1) increasing excise taxes on cigarettes is one of the most cost-effective short-term strategies to reduce tobacco consumption among adults and to prevent initiation among youth; and (2) the ability to sustain this reduction in per capita consumption is greater when the tax increase is combined with an antismoking campaign.⁵³

The following are elements for building capacity to implement and support tobacco use prevention and control interventions: a focus on change in social norms and environments that support tobacco use, policy and regulatory strategies, community participation, strategic use of media, development of local programs, coordination of statewide and local activities, linkage of school-based activities to community activities, and use of surveillance and evaluation techniques to monitor program impact. The importance of these elements has been demonstrated in States such as California, Massachusetts, Arizona, Oregon, and Florida.⁵⁴ In these and other States, tobacco control programs are being supported through funding from the Federal Government, private foundations, State tobacco taxes, State lawsuit settlements, and other sources.

Based on research findings and the experience of State and Federal tobacco control programs, there are six key components of tobacco use prevention and control interventions: (1) prevention and restriction of minors' access to tobacco; (2) treatment of nicotine addiction; (3) reduction of exposure to secondhand smoke; (4) counteradvertising and promotion; (5) economic incentives; and (6) product regulation.⁵⁵

Based on these six categories, the following areas will be used to organize the Healthy People 2010 tobacco objectives: (1) prevalence of tobacco use; (2) cessation and treatment; (3) exposure to secondhand smoke; (4) restriction of minors' access to tobacco; (5) changes in social norms (including counteradvertising and school programs); (6) economic initiatives; and (7) comprehensive State and local programs.

Disparities in Health

National data from 1995 reveal several disparities in smoking prevalence among adults.⁵⁶ Men (27.0 percent smoking prevalence) are significantly more likely to smoke than women (22.6 percent). American Indians/Alaska Natives (36.2 percent) are more likely to smoke than other racial and ethnic groups; furthermore, there are considerable variations in tobacco use prevalence by tribe. Hispanics (18.3 percent) and Asians/Pacific Islanders (16.6 percent) are less likely to smoke than other groups; however, regional and local data reveal much higher prevalences of smoking among specific population groups of Hispanics and Asians/Pacific Islanders.

The 1995 data further indicate that individuals aged 25 to 44 are significantly more likely to smoke (28.6 percent) than individuals aged 18 to 24 (24.8 percent), 45 to 64 (25.5 percent), and 65 and older (13.0 percent). In addition, individuals with 9 to 11 years of education (37.5 percent) have significantly higher levels of smoking than individuals with either 0 to 8 years of education or 12 years or higher; individuals with 16 or more years of education have the lowest smoking rates (14.0 percent). Finally, individuals below the poverty level are significantly more likely to smoke than individuals at or above the poverty level (32.5 percent vs. 23.8 percent).

Among adolescents, smoking rates differ between whites and African Americans.^{57,58} Starting in the 1980s rates of smoking among white and African American youth began to diverge, with African American youth showing markedly lower rates of smoking. By the late 1980s smoking rates among white teens were more than triple those of African American teens. In recent years, smoking has started to increase among African American male teens but African American female teens continue to have smoking rates considerably lower. Data from the YRBS indicate that in 1997, 40 percent of white high school females were smokers compared to 17 percent of African American high school females.⁵⁹

Smokeless tobacco use among adolescents also differs significantly by students' gender and race. In 1997, 15.8 percent of male high school students currently used smokeless tobacco, compared to only 1.5 percent for female high school students. Current smokeless tobacco use was 12.2 percent for non-Hispanic whites, 2.2 percent for non-Hispanic African Americans, and 5.1 percent for Hispanics.

Progress Toward Year 2000 Objectives

Of the 26 tobacco objectives included in Healthy People 2000, progress toward the target has been made for 18 objectives (3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.8, 3.9, 3.10, 3.11, 3.12, 3.13, 3.14, 3.16, 3.17, 3.18, 3.19, and 3.26), progress toward the target has been mixed for two objectives (3.22 and 3.23), and three objectives are moving away from the target (3.7, 3.21, and 3.25). Data beyond baseline were not available

Healthy People 2010 Objectives: Draft for Public Comment

for two objectives (3.15 and 3.24). Because of survey changes, progress cannot be assessed for objective 3.20. A summary of highlights of progress toward the objectives is presented below.

Coronary heart disease deaths (objective 3.1) declined considerably from the baseline and have almost reached the population-wide target of 100 deaths per 100,000. Declines also occurred for African American (objective 3.1a) but 1995 data indicate that achieving the target will be more difficult than for the population overall (1995 data point for African American: 147; target for African American: 115).

Lung cancer deaths (objective 3.2) in the overall population declined slightly from the baseline (38.3 per 100,000 in 1995, down from 38.5 at baseline). However, lung cancer deaths among females (objective 3.2a) have increased (26.9 in 1995 vs. 25.6 at baseline).

Cigarette smoking prevalence among adults (objective 3.4) has decreased slightly since baseline (24.7 percent in 1995, down from 29 percent at baseline; however, it remains considerably higher than the target of 15 percent.

Smoking cessation attempts (objective 3.6), measured as the proportion of smokers who quit smoking for a day, has increased toward the target of 50 percent; in 1995, 45.8 percent of smokers had quit for a day.

Children's exposure to tobacco smoke in the home (objective 3.8) decreased from the baseline of 39 percent to 27 percent in 1994; the target for this objective is 20 percent.

Objective 3.12 on State smoke-free indoor air laws was strengthened in the Healthy People 2000 Midcourse Review to only include laws that banned smoking or limited it to separately ventilated areas. From December 31, 1995, to December 31, 1997, the number of States with comprehensive smoking laws remained the same for private workplaces, public transportation, hospitals, day care centers, and grocery stores. During the same period, three States added comprehensive smoke-free indoor air laws in public workplaces and one added smoke-free restrictions in restaurants.

All States have enacted laws preventing the sale of tobacco products to individuals under the age of 18 (objective 3.13); however, as of fiscal year 1997, only four States had achieved a buy rate in compliance checks of 20 percent or less.

Objective 3.14 to establish State tobacco control plans has been achieved.

Cessation inquiry, counseling, and followup by clinicians (objective 3.16) varies by type of provider: Internists have achieved the target of 75 percent for inquiry about tobacco use; however, other types of providers have yet to meet the objective.

The methodology for objective 3.20 on reducing smoking among 12- to 17-year-olds changed during the time period for Healthy People 2000. The target of 6 percent was set based on the previous methodology. The 1996 data point was 18.3 percent.

The percentage of retail cigarette price that is made up by tax (objective 3.23) has decreased slightly from the baseline of 31.4 percent; the percentage of smokeless tobacco price that is made up by tax has increased slightly from the baseline of 11.8 percent. The target for both cigarettes and smokeless tobacco is 50 percent.

Draft 2010 Objectives

Prevalence of Tobacco Use

1. (Former 3.4, 3.9) Reduce to 13 percent the proportion of adults (18 and older) who use tobacco products. (Baseline: 24.7 percent used cigarettes in 1995; data for proportions using smokeless tobacco and for those using cigars is not available)

Select Populations	1995
African American, non-Hispanic	25.8%
American Indian/Alaska Native	36.2%
Asian/Pacific Islander	16.6%
Hispanic	18.3%
White, non-Hispanic	25.6%
Male	27.0%
Female	22.6%
People aged 18-24	24.8%
People aged 25-44	28.6%
People aged 45-64	25.5%
People aged 65+	13.0%
0-8 years of education	22.6%
9-11 years of education	37.5%
12 years of education	29.5%
13-15 years of education	23.6%
16+ years of education	14.0%
At or above poverty threshold	23.8%
Below poverty threshold	32.5%

Target Setting Method: Better than the best.

Data Source: National Health Interview Survey (NHIS), CDC, NCHS.

- 1a. Reduce past-month cigarette smoking among military personnel to no more than 13 percent. (Baseline: 31.9 percent in 1995)

Target Setting Method: Better than the best.

Data Source: Survey of Health Related Behaviors Among Military Personnel, Department of Defense.

- 1b. Reduce past-month smokeless tobacco use among male military personnel aged 18-24 to no more than 11 percent. (Baseline: 21.9 percent in 1995)

Target Setting Method: 50 percent improvement.

Data Source: Survey of Health Related Behaviors Among Military Personnel, Department of Defense.

2. (Former 3.4i) Reduce cigarette smoking among pregnant women to a prevalence of no more than 2 percent. (Baseline: 13.9 percent in 1995)

Select Populations	1995
African American, non-Hispanic	10.6%
American Indian/Alaska Native	20.9%
Asian or Pacific Islander	3.4%
Chinese	0.8%
Filipino	3.4%
Japanese	5.2%
Native Hawaiian and part Native Hawaiian	15.9%
Other Asian or Pacific Islander	2.7%
Hispanic	4.3%
Central and South American	8.2%
Cuban	4.1%
Mexican American	3.1%
Puerto Rican	10.4%
White, non-Hispanic	17.1%
Young women under 15	7.3%
Women aged 15-17	14.6%
Women aged 18-19	18.1%
Women aged 20-24	17.1%
Women aged 25-29	12.8%
Women aged 30-34	11.4%
Women aged 35-39	12.0%
Women aged 40-49	10.1%
0-8 years of education	12.6%
9-11 years of education	26.2%
12 years of education	17.7%
13-15 years of education	10.5%
16+ years of education	2.7%

Target Setting Method: Better than the best.

Data Source: National Vital Statistics System (NVSS), CDC, NCHS.

3. (Former 3.9, 3.20) Reduce the proportion of young people in grades 9 to 12 who have used tobacco products.

	1997	2010 Target
Any tobacco product	42.7%	28%
Cigarettes (past month)	36.4%	21%
Smokeless tobacco (past month)	9.3%	2%
Cigars (past month)	22.0%	9%

Select Populations	1997
Any Tobacco Use	
African American, non-Hispanic	29.4%
American Indian/Alaska Native	Not available
Asian/Pacific Islander	Not available
Hispanic	36.8%
White, non-Hispanic	46.8%
Male	48.2%
Female	36.0%
Cigarettes	
African American, non-Hispanic	22.7%
American Indian/Alaska Native	Not available
Asian/Pacific Islander	Not available
Hispanic	34.0%
White, non-Hispanic	39.7%
Male	37.7%
Female	34.7%
Smokeless Tobacco	
African American, non-Hispanic	3.2%
American Indian/Alaska Native	Not available
Asian/Pacific Islander	Not available
Hispanic	5.1%
White, non-Hispanic	12.2%
Male	15.8%
Female	1.5%
Cigars	
African American, non-Hispanic	19.4%
American Indian/Alaska Native	Not available
Asian/Pacific Islander	Not available
Hispanic	20.3%
White, non-Hispanic	22.5%
Male	31.2%
Female	10.8%

Target Setting Method: Elimination of disparities among demographic groups

Data Source: Youth Risk Behavior Survey (YRBS), CDC, NCCDPHP.

4. (Former 3.19) Increase by at least 1 year the average age of first use of tobacco products by adolescents. (Baseline: 12.4 years among 12- to 17-year-olds; 14.6 years among 18- to 25-year-olds)

Data Source: National Household Survey on Drug Abuse, SAMHSA.

5. Increase to 40 percent the proportion of young people in grades 9 to 12 who have never smoked. (Baseline: 29.8 percent in 1997)

Select Populations	1997
African American, non-Hispanic	31.6%
American Indian/Alaska Native	Not available
Asian/Pacific Islander	Not available
Hispanic	32.0%
White, non-Hispanic	29.6%
Male	29.1%
Female	30.7%

Target Setting Method: 35 percent improvement.

Data Source: Youth Risk Behavior Survey (YRBS), CDC, NCCDPHP.

Because tobacco use is linked with numerous adverse health outcomes, reducing the prevalence of tobacco use will reduce morbidity and mortality across a spectrum of conditions, including heart disease, cancer, and chronic lung disease. Objectives for many tobacco-attributable health conditions are included in chapters throughout Healthy People 2010.

Assessing the prevalence of tobacco use among both adults and youth is a critical element of public health surveillance. Indeed, in 1996 the Council of State and Territorial Epidemiologists (CSTE) added adult cigarette smoking as a notifiable condition, the first time that a behavior rather than a disease was designated a notifiable condition.⁶⁰ For the purpose of this CSTE reporting, the Behavioral Risk Factor Surveillance System is used for State estimates; for national estimates, the National Health Interview Survey (NHIS) is used.

Because the majority of initiation of tobacco use occurs in adolescence,⁶¹ direct measures of tobacco use in adolescence are important health indicators. Measures of use in adulthood provide an assessment of use that has extended beyond experimentation and initiation. Evidence indicates substitution of tobacco products among both adults and youth, so it is important to measure use of multiple products (cigarettes, smokeless tobacco, and cigars at a minimum). The YRBS is the data source for youth measures.

Cessation and Treatment

6. (Former 3.6) Increase to 75 percent the proportion of cigarette smokers aged 18 and older who stopped smoking cigarettes for a day. (Baseline: 45.8 percent stopped smoking for a day in 1995)

Target Setting Method: 50 percent higher than target for Healthy People 2000.

Data Source: National Health Interview Survey (NHIS), CDC, NCHS.

- 6a. (Developmental/Former 3.6) Increase to 75 percent the proportion of cigarette smokers aged 18 and older who stopped smoking cigarettes for a month.

- 1
2 **7. (Former 3.7) Increase smoking cessation during pregnancy, so that at least 60 percent of**
3 **women who are cigarette smokers at the time they become pregnant quit smoking early in**
4 **pregnancy and maintain abstinence for the remainder of their pregnancy, following delivery,**
5 **and through postpartum.** (Baseline: 31 percent smoking cessation during pregnancy in 1991)
6

7 **Target Setting Method:** Retain year 2000 target.
8

9 **Data Source:** National Health Interview Survey (NHIS), CDC, NCHS.
10

- 11 **8. (Developmental) Increase smoking cessation among new mothers, so that new mothers who quit**
12 **smoking during pregnancy maintain abstinence for at least 1 year past delivery.**
13

- 14 **9. (Developmental) Increase smoking cessation attempts among adolescent smokers.**
15

- 16 **10. Increase to 95 percent the proportion of patients who received advice to quit smoking during the**
17 **reporting year from a health care provider.** (Baseline: 61 percent of managed care participants
18 received advice to quit from a plan provider in 1996).
19

20 **Target Setting Method:** 55 percent improvement.
21

22 **Data Source:** Health Plan Employer Data and Information Set, National Committee for Quality
23 Assurance.
24

- 25 **11. (Developmental/Former 3.24) Increase to 100 percent the proportion of health plans that offer**
26 **treatment of nicotine addiction (e.g., tobacco use cessation counseling by health care providers,**
27 **tobacco use cessation classes, prescriptions for nicotine replacement therapies, and other**
28 **cessation services).**
29

30 **Target Setting Method:** Retain year 2000 target.
31

32 **Potential Data Source:** Addressing Tobacco in Managed Care Survey, Robert Wood Johnson
33 Foundation.
34

12. (Former 3.16) Increase to at least 75 percent the proportion of health care providers who routinely advise cessation and provide assistance, follow up, and document charts for all their tobacco-using patients. Providers to include physicians, dentists, nurses, dental hygienists, mental health professionals, social workers, psychologists, pharmacists, medical assistants, physician assistants, and home health care aides.

Percentage of Clinicians	1992 (unless noted)
Routinely providing service to 81–100 percent of patients	
Inquiry about tobacco use	
Pediatricians	33%
OB/GYNs	49%
Nurse practitioners	51%
Discussion of strategies to quit	
Pediatricians	19%
OB/GYNs	28%
Nurse practitioners	20%
Routinely providing service to 75 percent of patients	
Inquiry about smoking	1994
General dentists	33.0%
Dental hygienists	25.0%
Inquiry about smokeless tobacco	1994
General dentists	14.0%
Dental hygienists	9.0%
Advice about smoking (among patients reporting smoking)	1994
General Dentists	65.0%
Dental Hygienists	60.0%
Advice about smokeless tobacco use (among patients reporting use)	1994
General dentists	75.0%
Dental hygienists	84.0%

- 12a. Increase to at least 90 percent the proportion of internists and family physicians who routinely advise cessation and provide assistance, follow up, and document charts for all their tobacco-using patients.

Percentage of Clinicians	1992
Routinely providing service to 81–100 percent of patients	
Inquiry about tobacco use	
Internists	75%
Family physicians	59%
Discussion of strategies to quit	
Internists	50%
Family physicians	43%

Target Setting Method: Retain year 2000 target retained for objective 12; 20 percent improvement for objective 12a.

Data Sources: Primary Care Providers Survey, ODPHP; National Survey of Dentists and Hygienists' Tobacco Control Activities, University of Florida.

Nearly 70 percent of current smokers want to quit smoking and approximately 45 percent quit smoking for at least a day;⁶² however, only about 2.5 percent of current smokers stop smoking permanently each year.⁶³

Smoking cessation has major and immediate health benefits for men and women of all ages. For example, persons who quit smoking before age 50 have half the risk of dying in the next 15 years compared with continuing smokers.⁶⁴ In 1996, the Agency for Health Care Policy and Research (AHCPR) produced an evidence-based guideline that evaluated smoking cessation interventions available at the time.⁶⁵ The results clearly showed that a variety of smoking cessation interventions are effective: (1) simple advice to quit by a clinician (30 percent increase in cessation); (2) individual and group counseling (doubles cessation rates); (3) telephone hotlines/helplines (40 percent increase in cessation); and (4) nicotine replacement therapy (NRT) (up to double the cessation rates). The guidelines concluded that the efficacy of intervention increases with intensity of intervention.

AHCPR's guidelines also recommended that smoking cessation treatments (both pharmacotherapy and counseling) should be provided as paid services and providers should be reimbursed for delivering effective smoking cessation interventions. In addition, the guidelines concluded that effective reduction of tobacco use will require that health care systems make institutional changes that result in systematic identification of, and intervention with, all tobacco users at every visit.⁶⁶

Almost 44 percent of high school seniors who smoke report that they would like to stop smoking. About 30 percent of high school seniors who smoke report that they have tried to stop smoking but failed to do so.⁶⁷ Although many teen smokers want to quit or have tried to quit smoking, at present there are almost no proven interventions for tobacco use cessation among teenagers. Research is under way to assess effective cessation methods for young people, but expanded research efforts are needed.

Exposure to Secondhand Smoke

13. (Developmental) Increase the proportion of pediatricians and family physicians that inquire about secondhand smoke exposure in the home and advise reduction in secondhand smoke exposure for the patient and family.

14. (Former 3.10) Increase to 100 percent the proportion of schools with tobacco-free environments that include all school facilities, property, vehicles, and school events. (Baseline: 36.5 percent of middle/junior and senior high schools in 1994)

Target Setting Method: Retain year 2000 target.

Data Source: School Health Policies and Programs Study (SHPPS), CDC, DASH.

15. (Former 3.11) Increase to 100 percent the proportion of worksites with a formal smoking policy that prohibits smoking or limits it to separately ventilated areas at the workplace. (Baseline: 59 percent of worksites with 50 or more employees in 1992)

Target Setting Method: Retain year 2000 target.

Data Source: National Survey of Worksite Health Promotion Activities, ODPHP.

16. (Former 3.12) Enact in 50 States and the District of Columbia comprehensive laws on smoke-free indoor air that prohibit smoking or limit it to separately ventilated areas, including the following locations:

Locations	1997
Private workplaces	1
Public workplaces	12
Restaurants	3
Public transportation	17
Day care centers	21
Retail stores	4
Clean indoor air regulations	Not available
Local clean indoor air ordinances	Not available
Territorial clean indoor air laws	Not available
Tribal clean indoor air policies	Not available

Target Setting Method: Retain year 2000 target.

Data Source: Office on Smoking and Health Legislative Tracking System, CDC.

Data from a 1996 study found that among non-tobacco users, 87.9 percent had detectable levels of serum cotinine, a biological marker for exposure to secondhand smoke, yet only 37 percent of adult non-tobacco users were aware enough of their exposure to report having been exposed to secondhand smoke either at home or at work. Both home and workplace environments were found in this study to significantly contribute to the widespread exposure to secondhand smoke in the United States.⁶⁸ In addition, a recent study by CDC found an alarming level of secondhand smoke exposure of children in their homes. Exposure ranged from 11.7 percent of children between the ages of 0 and 17 in Utah to 34.2 percent of children in Kentucky.⁶⁹

Although a 1992-93 National Cancer Institute survey found that almost half of all workers had a smoke-free policy in their workplace, significant numbers of workers, especially those in blue-collar and service occupations, reported smoke-free policy rates considerably lower than the overall rate of 46 percent.⁷⁰ The occupational group least likely to have a smoke-free policy was food service workers—waiters, waitresses, cooks, bartenders, and counter help. Of these 5.5 million workers, 22 percent are teenagers. In a 1993 study, food service workers were estimated to have a 50 percent increased risk of dying from lung cancer compared to the general population, which was attributed in part to their workplace exposure to secondhand smoke.⁷¹

Policy, educational, and clinical interventions can reduce secondhand smoke exposure among the population. Policy approaches include the voluntary adoption of worksite restrictions, enactment of clean indoor air laws, and enforcement of restrictions. Public education campaigns and local community efforts to limit smoking in public places in California and Massachusetts have been associated with reported reductions in the exposure of both adults and children to secondhand smoke.^{72,73}

A 1996 study concluded that a portion of children's respiratory diseases and their associated morbidity may be prevented by decreasing or eliminating their exposure to secondhand smoke.⁷⁴

Another 1996 study concluded that secondhand smoke exposure exacerbates asthma and leads to 500,000 visits to physicians by children each year.⁷⁵ The American Academy of Pediatrics has recommended that

pediatricians inform parents about the health hazards of secondhand smoke and provide guidance on smoking cessation.⁷⁶

Restriction of Minors' Access

17. (Former 3.13) Enforce minors' access laws so that the buy rate in compliance checks conducted in all 50 States and the District of Columbia is no higher than 5 percent. (Baseline: 0 States in 1990)

Target Setting Method: Retain year 2000 target.

Data Source: State Synar Enforcement Reporting, CSAP, SAMHSA.

18. Increase to 100 percent the proportion of States with retail licensure systems that include license suspension or revocation for violations of State minors' access laws. (Baseline: 64 percent of States with some form of retail licensure suspend/revoke the license for violation of minors' access laws in 1997)

Target Setting Method: 56 percent improvement.

Data Source: Office on Smoking and Health Legislative Tracking System, CDC.

Restricting minors' access to tobacco products is one core element in a comprehensive approach to tobacco use prevention. Recent data indicate that about 57 percent of students in grades 9 through 12 usually bought their cigarettes from a store, from a vending machine, or by giving someone else money to purchase cigarettes: Over three-fourths of 9th to 12th grade students who had bought cigarettes in the previous month were not asked to show proof of age.⁷⁷ Earlier data indicate that only about half of smokers aged 12 to 17 were *ever* asked to show proof of age when they tried to purchase cigarettes.⁷⁸ Although all States prohibit the sale of tobacco products to minors, enforcement of laws has been limited until recent years. States and localities have undertaken a number of measures to reduce minors' access, including policy establishment, retail licensure, enforcement activities, compliance checks, retailer education, and youth involvement. State restrictions on tobacco vending machines vary, with the most stringent restrictions banning vending machines except in areas inaccessible to minors. Not all States have retail licensure systems; among those that do, not all will suspend or revoke licenses for violation of State minors' access laws. Federal policy initiatives, such as the Synar and FDA regulations,^{79,80} require the active participation of State and local communities to ensure effective implementation.

Social Norms

19. (Former 3.21) Increase to 95 percent the proportion of 8th, 10th, and 12th graders who disapprove of use of one or more packs of cigarettes per day. (Baseline: in 1997, 8th graders, 80.3 percent; 10th graders, 73.8 percent; 12th graders, 67.1 percent)

Target Setting Method: Retain year 2000 target.

Data Source: Monitoring the Future Survey, NIH, NIDA.

1 **20. (Former 3.22) Increase to 95 percent the proportion of 8th graders who associate harm with**
2 **tobacco use.** (Baseline: in 1997, 52.6 percent of 8th graders perceived harm in smoking one or more
3 packs of cigarettes per day; 10th graders, 59.9 percent; 12th graders, 68.7 percent; 35.2 percent of 8th
4 graders perceived harm in using smokeless tobacco regularly ; 10th graders, 42.2 percent; 12th graders,
5 38.6 percent)

6
7 **Target Setting Method:** Retain year 2000 target.

8
9 **Data Source:** Monitoring the Future Survey, NIH, NIDA.

10
11 **21. (Developmental) Include evidence-based tobacco use prevention in the curricula in __ percent**
12 **of elementary, middle, and secondary schools, preferably as part of comprehensive school**
13 **health education.**

14
15 **Potential Data Source:** School Health Policies and Programs Study (SHPPS), CDC, DASH.

16
17 Attitudes of young people regarding both the acceptability and harm of tobacco use provide an indication
18 of their susceptibility to tobacco use.⁸¹ The 1994 Surgeon General's Report on tobacco concluded that the
19 following are all risk factors for tobacco use among adolescents: adolescents' perceptions that tobacco use
20 is normative, peers' and siblings' approval of tobacco use, and the belief that tobacco use is functional
21 (i.e., provides benefits). The Report further concluded that for smokeless tobacco use, insufficient
22 knowledge among youth of the health consequences also is a factor.⁸²

23
24 Limiting the appeal of tobacco products to young people involves both restricting tobacco advertising and
25 promotions, and countering pro-tobacco messages. The mass media can serve as a powerful tool for
26 tobacco control, as media have the ability to reach large segments of the population quickly and efficiently.
27 Television, radio, magazines, and other media can deliver information and educational messages directly
28 to targeted audiences; build public support for tobacco control programs and policies; reinforce social
29 norms supporting the nonuse of tobacco; and counteract the pro-use messages and images of tobacco
30 marketing and public relations campaigns.

31
32 An essential element in programs to reduce tobacco's appeal to youth is to change the current social
33 environment that reinforces the acceptability of tobacco use.⁸³⁻⁸⁵ This requires strategies to counter the
34 billions of dollars' worth of tobacco advertising and promotion that bombard young people with false and
35 misleading messages and images about tobacco.⁸⁶⁻⁸⁸ Paid counteradvertising campaigns to deglamorize
36 tobacco use, especially among young people, with unequivocal messages about the deleterious effects of
37 tobacco use on health, performance, and appearance, have been an integral part of the California, Arizona,
38 and Massachusetts Tobacco Control Programs.⁸⁹⁻⁹² Preliminary results from each of these programs
39 indicate that the media programs have reached youth, adults, and multicultural populations in those States,
40 are widely supported by the residents of those States, and have achieved their program objectives.

41
42 In addition to efforts to limit and counter tobacco advertising, effective prevention approaches include
43 school-based prevention programs as an integral part of communitywide strategies that address the overall
44 social context of tobacco use.^{93,94} School-based tobacco prevention programs that identify the social
45 influences that promote tobacco use among youth and teach skills to resist such influences have
46 demonstrated consistent and significant reductions or delays in adolescent smoking.^{95,96} However, the
47 effects of these programs dissipate over time if they are not followed by additional educational
48 interventions or linkages to community programs. Further studies have shown that the effectiveness of
49 school-based tobacco prevention programs appears to be strengthened by (1) booster sessions or further

application of the programs, and (2) communitywide programs involving parents, school policies, mass media, youth access, and community organizations.⁹⁷⁻¹⁰² A multicomponent approach to school-based tobacco use prevention, as outlined in the CDC *Guidelines for School Health Programs to Prevent Tobacco Use and Addiction*,¹⁰³ also may increase the long-term effectiveness of prevention efforts.

Economic Incentives

22. Increase the inflation-adjusted price of cigarettes 100 percent by the year 2010. (Baseline: \$1.95 in 1997)

Target Setting Method: 100 percent improvement.

23. (Developmental) Increase the inflation-adjusted price of chewing tobacco, snuff, cigars, pipe tobacco, and roll-your-own tobacco 100 percent by the year 2010. (Baseline data not available)

As with almost all consumer products, the demand for cigarettes decreases as price is increased. An increase in the excise tax on tobacco products would reduce rates of use of both cigarettes and smokeless tobacco among both adults and youth. Economists agree that a 10 percent increase in the price of cigarettes will reduce overall smoking among adults by approximately 4 percent.¹⁰⁴⁻¹⁰⁶ Data suggest that the prevention effect on youth would be at least as large if not larger.¹⁰⁷⁻¹⁰⁹

The 1989 General Accounting Office (GAO) report, *Teenage Smoking: Higher Excise Tax Should Significantly Reduce the Number of Smokers*,¹¹⁰ concluded that for every 10 percent increase in the price of cigarettes, there would be a 7.6 to 12 percent decrease in smoking participation rates (i.e., whether teens smoke at all) among teens. The report concludes that among teens, smoking participation responds more strongly to price than does the amount of daily cigarette consumption. Studies conducted since this GAO report reinforce and support these conclusions.¹¹¹ Data also indicate that earmarking funds from an excise tax increase for tobacco prevention and control programs both increases public support for the proposed tax and increases the public health impact of the price increase.^{112,113}

Comprehensive State and Local Tobacco Control Programs

24. (Developmental) Establish in all 50 States and in the District of Columbia comprehensive, evidence-based tobacco control programs.

Potential Data Source: CDC/HHS program records.

25. (Former 3.25) Reduce to 0 the number of States and the District of Columbia with preemptive tobacco control laws. (Baseline: In 1997, 27 States had preemptive clean indoor air or minors' access laws)

Target Setting Method: Retain year 2000 target.

Data Source: Office on Smoking and Health Legislative Tracking System, CDC.

Evidence indicates that comprehensive tobacco control programs are effective. However, investments in such programs to date have been seriously limited. As described above, data from California and Massachusetts indicate that the ability to sustain reductions in per capita consumption due to excise tax increases is greater when the tax increase is combined with an antismoking campaign (including

community, media, and school programs). Per capita cigarette consumption in California and Massachusetts has declined 2 to 3 times faster than in the rest of the Nation. In addition, the rapid rise in youth smoking rates experienced nationwide were slowed in both California and Massachusetts as a result of the combined effect of a tax increase and a strong tobacco control program.¹¹⁴ Other analyses also suggest that comprehensive programs, including media, have reduced the rate of increase in youth smoking in States with programs funded by excise taxes (such as Massachusetts) compared with the rest of the Nation.¹¹⁵

In the Minnesota Heart Health Program, smoking rates were reduced by approximately 40 percent in the intervention community with a combined school-based curriculum, community-based activities, and mass media interventions.¹¹⁶ Furthermore, a preliminary report on the effectiveness of the American Stop Smoking Intervention Study (ASSIST) indicates that between 1993 and 1994, per capita cigarette consumption was 7 percent less in the 17 ASSIST States than in the remaining States (excluding California).¹¹⁷

Preemptive State laws limit the ability of State and local programs to address major areas of tobacco control, in particular smoke-free indoor air and minors' access policies. A preemptive State tobacco control law prevents local jurisdictions from enacting restrictions that are more restrictive than the State law, or that vary from the State law. The tobacco industry attempts to promote such laws as health promotion efforts that ensure a minimum uniform set of restrictions for all communities. However, such laws usually afford less protection and prevent local governments from adopting more restrictive provisions in the future.¹¹⁸ Preemptive laws have led, for example, to weaker public health standards, loss of community education involved in the passage of local ordinances, more difficulty with enforcement at the local level, and lower compliance with the laws.¹¹⁹ Several national organizations have expressed opposition to the enactment of preemptive laws, including the American Public Health Association, the Institute of Medicine, and a working group of State Attorneys General.

Related Objectives From Other Focus Areas

Educational and Community-Based Programs

- 3 Undergraduate health risk behavior information
- 5 Worksite health promotion programs

Environmental Health

- 16 Exposure to tobacco smoke

Access to Quality Health Services

- A.2 Insurance coverage
- A.3 Routine screening about lifestyle risk factors
- A.5 Training to address health disparities
- D.2 Primary care evaluation

Maternal, Infant, and Child Health

- 3 SIDS mortality
- 9 Preconception counseling
- 22 Tobacco use during pregnancy

Cancer

- 1 Cancer deaths

- 2 Lung cancer deaths
- 6 Oropharyngeal cancer deaths
- 9 Provider counseling about preventive measures

Diabetes

- 23 Diabetes education

Heart Disease and Stroke

- 1 Coronary heart disease deaths
- 15 Knowledge of early warning symptoms of stroke

Mental Health and Mental Disorders

- 22 State plans to address co-occurring disorders

Respiratory Diseases

- 1 Deaths (asthma)
- 14 Prevalence: Chronic Obstructive Pulmonary Disease (COPD)
- 15 Deaths (COPD)
- 17 Training in early signs of COPD

Substance Abuse

- 5 Drug-free youth
- 6 Adolescent use of illicit substances
- 14 Peer disapproval of substance abuse
- 15 Perception of risk associated with substance abuse
- 20 Lost productivity
- 21 Community partnerships and coalitions

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